

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph beginning at page 1, line 13, with the following rewritten paragraph:

In ~~[[the]]~~ mobile telecommunications, it ~~may occur~~ ~~comes into question~~ that the mobile device ~~becomes uncommunicable~~ stops communicating with the base station due to an obstacle etc. on a wireless transmission path. In particular, with the technique employing ~~[[the]]~~ a ground base station, there is a limit to height of a location for installing the base station, whereby it is difficult to cover a service region so that ~~such a blind region is~~ regions are not generated. In the prior art, this problem is solved, for example, by ~~newly~~ additionally mounting a small-scale wireless area in the vicinity of the blind region. ~~As a merit~~ A benefit of mounting the small wireless area is ~~listed~~ an improvement in an efficiency of utilizing a frequency, a stabilization of transmission/reception environments at the time of standing still, or the like in addition to a countermeasure to the blind region.

Please replace the paragraph beginning at page 2, line 5, with the following rewritten paragraph:

Further, as the technology of preventing communication in the vicinity of the blind region from being interrupted, the technology has also been disclosed of laying down, for example, leakage cables on both sides of the location where vehicles etc. pass through so that one part of the zone is overlapped for the purpose of eliminating the blind region, thereby to enable the antenna mounted on the vehicle etc. to receive a radio wave from one of the leakage cables (for example, Patent document 1 and Patent document 2), respectively, JP-P1994-237194A and JP-P2003-174398A.

[0004]

~~{Patent document 1}~~

~~JP-P1994-237194A~~

~~{Patent document 2}~~

~~JP-P2003-174398A~~

Please replace the paragraph beginning at page 3, line 14, with the following rewritten paragraph:

However, with the technology of introducing small wireless areas in the whole region, out of the foregoing prior arts, the number of the base station a unit area augments, which gives rise to the demerit that the ~~installation~~ installations cost rises. In addition ~~hereto~~, inevitably, an overlap of the area is also lessened, whereby the hand-over process at the moment of a terminal's moving has to be performed at a high speed and at a high frequency, which causes the operational cost as well to rise. Further, the problem that the frequency utilization efficiency is remarkably low due to size of the wireless area, in particular, in a case where the train interval is short cannot be solved.

Please replace the paragraph beginning at page 4, line 11, with the following rewritten paragraph:

~~Thereupon~~ Accordingly, the present invention has been accomplished in consideration of the above-mentioned problems, and an object thereof lies in solving the above-mentioned problems by providing a technology that enables the interval of the base station, which is broader than the conventional one, to be employed, yet ~~both of~~ allowing the speed and the frequency of the hand-over process to be lowered, and in addition ~~hereto~~, the bandwidth utilization efficiency, which is higher as compared with that of the conventional example, ~~[[to]]~~ can be realized.

Please replace the paragraph beginning at page 5, line 2, with the following rewritten paragraph:

two or more antennas installed separately ~~at an extent~~ such that the base station of which radio wave intensity becomes maximum differs antenna by antenna in a case where the mobile device has stood still in the vicinity of a boundary of wireless areas; and

a communication means for simultaneously utilizing the two or more antennas, thereby to simultaneously ~~make communication~~ communicate with a plurality of the base stations.

Please replace the paragraph beginning at page 5, line 15, with the following rewritten paragraph:

two or more antennas installed separately ~~at an extent~~ such that the base station of which a communication quality becomes most excellent differs antenna by antenna in a case where the mobile device ~~has stood~~ stands still in the vicinity of a boundary of wireless areas; and
a communication means for simultaneously utilizing the two or more antennas, thereby to simultaneously ~~make communication~~ communicate with a plurality of the base stations.

Please replace the paragraph beginning at page 6, line 3, with the following rewritten paragraph:

two or more antennas installed separately ~~at an extent~~ such that the base station of which a communication quality becomes most excellent differs antenna by antenna in a case where the mobile device ~~has stood~~ stands still in the vicinity of a boundary of wireless areas;

Please replace the paragraph beginning at page 6, line 10, with the following rewritten paragraph:

a communication means for simultaneously utilizing the two or more antennas and the two or more transmission/reception means, thereby to simultaneously ~~make communication~~ communicate with a plurality of the base stations.

Please replace the paragraph beginning at page 10, line 21, with the following rewritten paragraph:

~~{Fig. 1}~~ Fig. 1 is a view illustrating a configuration of an embodiment 1.

~~{Fig. 2}~~ Fig. 2 is a view illustrating a first wireless area arrangement example of the embodiment 1.

Fig. 2A is a block diagram illustrating a process and system of the invention.

~~{Fig. 3}~~ Fig. 3 is a view illustrating a hand-over method in the embodiment 1.

~~{Fig. 4}~~ Fig. 4 is a view illustrating a method of selecting a hand-over destination in the embodiment 1.

~~[Fig. 5]~~ Fig. 5 is a view illustrating a method of avoiding the blind region in the embodiment 1.

~~[Fig. 6]~~ Fig. 6 is a view illustrating a second wireless area arrangement example of the embodiment 1.

~~[Fig. 7]~~ Fig. 7 is a view illustrating a configuration of an embodiment 2.

~~[Fig. 8]~~ Fig. 8 is a view illustrating a configuration in the mobile body side and a first wireless area arrangement example of an embodiment 3.

~~[Fig. 9]~~ Fig. 9 is a view illustrating a second wireless area arrangement example of the embodiment 3.

~~[Fig. 10]~~ Fig. 10 is a view illustrating a configuration in the mobile device side and an apparatus arrangement example on the track of an embodiment 4.

Please replace the paragraph beginning at page 12, line 8, with the following rewritten paragraph:

In the present invention, a plurality of the antennas are distributed and arranged on the mobile device (mobile body) in a moving direction of the mobile body. It is assumed that the antennas at both ends are away from each other ~~at an extent~~ such that the distance between them is not negligible as compared with the interval of the wireless base station. Herein, the so-called extent of being not negligible signifies the extent that the base station of which the reception power becomes maximum differs for each of the antennas at both ends at the time that the mobile body is at a standstill in the vicinity of the boundary of two wireless areas, facing in the direction of the line connecting two base stations, thereby enabling the base station to be stably recognized. Assuming such a configuration enables the radio wave to be stably received from a plurality of the base stations.

Please insert the following paragraph beginning at page 18, line 24:

In the foregoing description and with reference to Fig. 2A, there is shown a block diagram where the transmission and reception state detection is carried out in a facility which carries out the functionality of testing the state of the signals from the antennas with the ultimate decision on

the handing over of the communication to a different base station being carried out in the hand-over process controller, as shown.